

**WHAT IS CLAIMED IS:**

1. A trade filtering process for identifying suspect trades comprising:
  - a trade monitoring process for monitoring a trade price associated with each trade of a specific stock during a trading session;
  - a trade comparison process, responsive to said trade monitoring process, for comparing said trade price of each said trade of a specific stock to a known acceptable price for that specific stock to identify which said trades are suspect trades; and
  - a suspect trade filtering process, responsive to said trade comparison process, for preventing the processing of said suspect trades.
2. The trade filtering process of claim 1 further comprising an acceptable price determination process for determining the value of said known acceptable price.
3. The trade filtering process of claim 2 wherein said acceptable price determination process includes:
  - a known price determination process for determining a last known good price for said specific stock being traded.
4. The trade filtering process of claim 3 wherein said acceptable price determination process includes:
  - a price acceptability window process for determining said known acceptable price, wherein said known acceptable price is an acceptable range of prices that span from a specific amount below said last known good price to a specific amount above said last known good price, with trades that have trade prices that do not fall within said acceptable range of prices being considered suspect trades.
5. The trade filtering process of claim 4 wherein said acceptable price determination process includes:
  - a last known good price adjustment process for adjusting said last known good price of said specific stock being traded to be equal to said trade price of the last non-suspect trade.

1 6. The trade filtering process of claim 4 wherein said specific amount above said last  
2 known good price and said specific amount below said last known good price are fixed dollar  
3 amounts.

1 7. The trade filtering process of claim 4 wherein said specific amount above said last  
2 known good price and said specific amount below said last known good price are a  
3 percentage of said first trade price.

1 8. The trade filtering process of claim 7 wherein said percentage of said last known  
2 good price is 15%.

1 9. The trade filtering process of claim 3 further comprising a last known good price  
2 initiation process for adjusting said last known good price of said specific stock being traded  
3 to be equal to a reference value whenever said stock is being traded for the first time in said  
4 trading session.

1 10. The trade filtering process of claim 9 wherein said reference value is said trade price  
2 of said specific stock being traded.

1 11. The trade filtering process of claim 9 wherein said reference value is a previous day's  
2 closing price.

1 12. The trade filtering process of claim 3 further comprising a suspect trade resolution  
2 process for determining if each said suspect trade is a bad trade.

1 13. The trade filtering process of claim 12 wherein said suspect trade resolution process  
2 includes:

3 a suspect trade repository process for storing said trade price of said suspect  
4 trade;

5 a non-suspect price determination process for determining the trade price of at  
6 least a first non-suspect trade of the specific stock to occur after said suspect trade;

7 a suspect trade acceptability window process for determining a suspect  
8 acceptability price range, wherein said suspect acceptability price range spans from a  
9 specific amount below said trade price of said suspect trade to a specific amount  
10 above said trade price of said suspect trade, wherein said suspect trade is considered a  
11 non-suspect trade if the trade price of said at least a first non-suspect trade falls within  
12 said suspect acceptability price range; and

13 a last known good price adjustment process for adjusting said last known good  
14 price of said specific stock being traded to be equal to said trade price of the last non-  
15 suspect trade.

1 14. The trade filtering process of claim 13 wherein said at least a first non-suspect trade is  
2 one trade.

1 15. The trade filtering process of claim 13 wherein said at least a first non-suspect trade is  
2 three consecutive trades.

1 16. The trade filtering process of claim 13 wherein said specific amount above said trade  
2 price of said suspect trade and said specific amount below said trade price of said suspect  
3 trade are fixed dollar amounts.

1 17. The trade filtering process of claim 13 wherein said specific amount above said trade  
2 price of said suspect trade and said specific amount below said trade price of said suspect  
3 trade are a percentage of said trade price of said suspect trade.

1 18. The trade filtering process of claim 17 wherein said percentage of said trade price of  
2 said suspect trade is 5%.

1 19. The trade filtering process of claim 1 wherein said trade monitoring process monitors  
2 a trade volume associated with each said trade, said trade filtering process further  
3 comprising:

4 a validity filter process for examining said trade volume and said trade price  
5 of each said trade, wherein said validity filter process discards trades whose said trade

- 6 volume is negative, whose said trade volume is zero, whose said trade price is  
7 negative, and whose said trade price is zero.

1 20. A trade filtering process for preventing the processing of suspect trades comprising:

2 a trade monitoring process for monitoring a trade price associated with each  
3 trade of a specific stock during a trading session;

4 a trade comparison process, responsive to said trade monitoring process, for  
5 comparing said trade price of each said trade of a specific stock to a known  
6 acceptable price for that specific stock to determine which said trades are suspect  
7 trades;

8 a trade filtering process, responsive to said trade comparison process, for  
9 preventing the processing of said suspect trades;

10 a known price determination process for determining a last known good price  
11 for a specific stock being traded;

12 a price acceptability window process for determining said known acceptable  
13 price, wherein said known acceptable price is an acceptable range of prices which  
14 span from a specific amount below said last known good price to a specific amount  
15 above said last known good price, wherein said trades which have trade prices that do  
16 not fall within said acceptable range of prices are considered suspect trades; and

17 a last known good price adjustment process for adjusting said last known good  
18 price of said specific stock being traded to be equal to said trade price of the last non-  
19 suspect trade.

1 21. The trade filtering process of claim 20 further comprising a suspect trade resolution  
2 process for determining if each said suspect trade is a bad trade.

1 22. The trade filtering process of claim 19 wherein said suspect trade resolution process  
2 includes:

3 a suspect trade repository process for storing said trade price of said suspect  
4 trade;

5 a non-suspect price determination process for determining the trade price of at  
6 least a first non-suspect trade of the specific stock to occur after said suspect trade;

7 a suspect trade acceptability window process for determining a suspect  
8 acceptability price range, wherein said suspect acceptability price range spans from a  
9 specific amount below said trade price of said suspect trade to a specific amount  
10 above said trade price of said suspect trade, wherein said suspect trade is considered a  
11 non-suspect trade if the trade price of said at least a first non-suspect trade falls within  
12 said suspect acceptability price range; and

13 a last known good price adjustment process for adjusting said last known good  
14 price of said specific stock being traded to be equal to said trade price of the last non-  
15 suspect trade.

1 23. A trade filtering method for preventing the processing of suspect trades comprising:  
2 monitoring a trade price associated with each trade of a specific stock during a  
3 trading session;  
4 comparing the trade price of each trade of a specific stock to a known  
5 acceptable price for that specific stock to determine which trades are suspect trades;  
6 and  
7 preventing the processing of the suspect trades.

1 24. The trade filtering method of claim 23 further comprising determining the value of  
2 the known acceptable price.

1 25. The trade filtering method of claim 24 wherein determining the value of the known  
2 acceptable price includes:  
3 determining a last known good price for the specific stock being traded;  
4 determining the known acceptable price, wherein the known acceptable price  
5 is an acceptable range of prices which span from a specific amount below the last  
6 known good price to a specific amount above the last known good price, wherein the  
7 trades which have trade prices that do not fall within the acceptable range of prices  
8 are considered suspect trades; and  
9 adjusting the last known good price of the specific stock being traded to be  
10 equal to the trade price of the last non-suspect trade.

1 26. The trade filtering method of claim 25 further comprising adjusting the last known  
2 good price of the specific stock being traded to be equal to a reference value whenever the  
3 stock is being traded for the first time in the trading session.

1 27. The trade filtering method of claim 25 further comprising determining if each suspect  
2 trade is a bad trade.

1     28.     The trade filtering method of claim 27 wherein determining if each suspect trade is a  
2     bad trade includes:

3             storing the trade price of the suspect trade;

4             determining the trade price of at least a first non-suspect trade of the specific  
5     stock to occur after the suspect trade;

6             determining a suspect acceptability price range, wherein the suspect  
7     acceptability price range spans from a specific amount below the trade price of the  
8     suspect trade to a specific amount above the trade price of the suspect trade, wherein  
9     the suspect trade is considered a non-suspect trade if the trade price of the at least a  
10    first non-suspect trade falls within the suspect acceptability price range; and

11            adjusting the last known good price of the specific stock being traded to be  
12    equal to the trade price of the last non-suspect trade.

1     29.     The trade filtering method of claim 23 further comprising:

2             monitoring a trade volume associated with each trade;

3             examining the trade volume and trade price of each trade; and

4             discarding trades whose trade volume is negative, whose trade volume is zero,  
5     whose trade price is negative, and whose trade price is zero.



1 30. A computer program product residing on a computer readable medium having a  
2 plurality of instructions stored thereon which, when executed by the processor, cause that  
3 processor to:

4 monitor a trade price associated with each trade of a specific stock during a  
5 trading session;

6 compare the trade price of each trade of a specific stock to a known acceptable  
7 price for that specific stock to determine which trades are suspect trades; and

8 prevent the processing of the suspect trades.

1 31. The computer program product of claim 30 wherein said computer readable medium  
2 is a hard drive.

1 32. The computer program product of claim 30 wherein said computer readable medium  
2 is a read-only memory.

1 33. The computer program product of claim 30 wherein said computer readable medium  
2 is a random-access memory.

1 34. A processor and memory configured to:

2 monitor a trade price associated with each trade of a specific stock during a  
3 trading session;

4 compare the trade price of each trade of a specific stock to a known acceptable  
5 price for that specific stock to determine which trades are suspect trades; and

6 prevent the processing of the suspect trades.

1 35. The processor and memory of claim 34 wherein said processor and memory are  
2 incorporated into a personal computer.

1 36. The processor and memory of claim 34 wherein said processor and memory are  
2 incorporated into a single board computer.

1 37. The processor and memory of claim 34 wherein said processor and memory are  
2 incorporated into an array of network servers.

- 1 38. A trade filtering process for identifying suspect trades comprising:
- 2 a trade monitoring process for monitoring a trade price associated with each
- 3 trade of a specific stock during a trading session;
- 4 a trade comparison process, responsive to said trade monitoring process, for
- 5 comparing said trade price of each said trade of a specific stock to a known
- 6 acceptable price for that specific stock to identify which said trades are suspect
- 7 trades;
- 8 a suspect trade filtering process, responsive to said trade comparison process,
- 9 for preventing the processing of said suspect trades;
- 10 a known price determination process for determining a last known good price
- 11 for said specific stock being traded; and
- 12 a last known good price initiation process for adjusting said last known good
- 13 price of said specific stock being traded to be equal to a reference value whenever
- 14 said stock is being traded for the first time in said trading session.

- 1       39.     A trade filtering process for identifying suspect trades comprising:
- 2                 a trade monitoring process for monitoring a trade price associated with each
- 3       trade of a specific stock during a trading session;
- 4                 a trade comparison process, responsive to said trade monitoring process, for
- 5       comparing said trade price of each said trade of a specific stock to a known
- 6       acceptable price for that specific stock to identify which said trades are suspect
- 7       trades;
- 8                 a suspect trade filtering process, responsive to said trade comparison process,
- 9       for preventing the processing of said suspect trades; and
- 10                a suspect trade resolution process for determining if each said suspect trade is
- 11       a bad trade.

- 1     40.     A trade filtering process for identifying suspect trades comprising:
- 2             a trade monitoring process for monitoring a trade price and a trade volume
- 3             associated with each trade of a specific stock during a trading session;
- 4             a trade comparison process, responsive to said trade monitoring process, for
- 5             comparing said trade price of each said trade of a specific stock to a known
- 6             acceptable price for that specific stock to identify which said trades are suspect
- 7             trades;
- 8             a suspect trade filtering process, responsive to said trade comparison process,
- 9             for preventing the processing of said suspect trades; and
- 10            a validity filter process for examining said trade volume and said trade price
- 11            of each said trade, wherein said validity filter process discards trades whose said trade
- 12            volume is negative, whose said trade volume is zero, whose said trade price is
- 13            negative, and whose said trade price is zero.

- 1 41. A trade filtering method for preventing the processing of suspect trades comprising:  
2 monitoring a trade price associated with each trade of a specific stock during a  
3 trading session;  
4 determining the value of a known acceptable price for that specific stock;  
1 comparing the trade price of each trade of a specific stock to the known  
2 acceptable price to determine which trades are suspect trades; and  
3 preventing the processing of the suspect trades.